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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/489,864
Filing Date: January 24, 2000
Appellant(s): SAMSON ET AL.

MAILED

JAN 19 2007

Technology Center 2100

Gregg Jansen
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11/17/2006 appealing from the Office action mailed 5/6/2004.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

The amendment after final rejection filed on 6/24/2004 has not been entered.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,388,690

LUMSDEN

6-1983

5,014,038

LEIGH-MONSTEVENS et al. 5-1991

6,526,839	BARGER et al.	3-2003
3,355,944	SIPIN et al.	12-1967
4,933,668	OYER et al.	6-1990
6,289,456	KUO et al.	9-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

A-B. *Claim Rejections - 35 USC § 112*

Claims 1, 12, 23 & 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation that the host signals a tamper condition in the signal conditioning circuitry was not disclosed in the specification. The instant specification discloses the host generating a signal indicating possible tampering or other error (specification, p. 8, ¶4).

Regarding the rejection of claims 1, 12, 23 & 34 under 35 U.S.C. 112, ¶2, in light of Appellant's description in the brief (p. 7, ¶4), "signal a tampering condition in the signal conditioning circuitry" is understood to be equivalent to "signal a tampering condition, indicative of a tampering condition existing in the signal conditioning circuitry". **Therefore, the rejection under 35 U.S.C. 112, ¶2 is withdrawn.**

C. *Claim Rejections - 35 USC § 102*

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,388,690 to **Lumsden**. Lumsden discloses a host system/central computer (col. 1, lines 56-60) that receives data from and sends data to signal conditioning circuitry/transponder (col. 1, lines 11-14), a processing unit/processor in said host system/central computer and a memory connected to said processing unit/processor (col. 2, lines 17-38 & col. 8, lines 54-62) and instructions for directing said processing unit/processor in said host system to periodically transmit a request (col. 4, lines 44-59) for authentication information/word set (col. 8, line 54 – col. 9, line 6) from said signal conditioning circuitry/transponder in response to said request, comparing said authentication information/word set with initial information (transponder identification code, customer identification code (col. 8, lines 54-64) and predetermined quota (col. 4, lines 35-40)) and signal a tampering condition/load shed (col. 4, lines 35-40) in the signal conditioning circuitry/transponder in response to said authentication information/word set not being equal to said initial information (col. 4, lines 35-40).

D. Claim Rejections - 35 USC § 103

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Lumsden** in view of U.S. Patent 6,526,839 to Barger et al. (**Barger**) in further view of U.S. Patent 3,355,944 to **Sipin**. Lumsden discloses a host system/central computer (col. 1, lines 56-60) that receives data from and sends data to signal conditioning circuitry/transponder (col. 1, lines 11-14), a processing unit/processor in said host system/central computer and a memory connected to said processing unit/processor (col. 2, lines 17-38 & col. 8, lines 54-62) and instructions for directing said processing unit/processor in said host system to periodically transmit a request (col. 4, lines

44-59) for authentication information/word set (col. 8, line 54 – col. 9, line 6) from said signal conditioning circuitry/transponder in response to said request, comparing said authentication information/word set with initial information (transponder identification code, customer identification code (col. 8, lines 54-64) and predetermined quota (col. 4, lines 35-40)) and signal a tampering condition/load shed (col. 4, lines 35-40) in the signal conditioning circuitry/transponder in response to said authentication information/word set not being equal to said initial information (col. 4, lines 35-40). Lumsden lacks disclosure of meter electronics for a Coriolis flowmeter and lacks pick-off sensors affixed to the Coriolis flowmeter. However, Sipin teaches that Coriolis-type flowmeters are used because of their low resistance to flow and lack of moving parts (see col. 1, lines 1-31). Sipin discloses one tube through which material flows (see Fig. 1), a driver (see Fig. 6, element 82) affixed to the tube that vibrates the tube as the material flows through the tube (see Fig. 6, elements 57 & 58 & col. 6, lines 31-49) and sensors affixed to at least two different points of the tube indicating vibrations at of the tube at the two points (see Fig. 9, elements 83 & 84 & col. 7, lines 1-23). Sipin further discloses that the Coriolis type flowmeter uses the sensors to measure parameters/the mass flow of fluent matter (see col. 1, lines 8-11 & col. 1, liens 19-23). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a Coriolis-type flowmeter because of their low resistance to flow and lack of moving parts, as taught by Sipin (see col. 1, lines 1-31). Lumsden, as modified, lacks pick-off sensors affixed to the Coriolis flowmeter. However, Barger teaches that “typical known devices use pick off sensors” (see col. 1, lines 57-67). The flowmeter measures mass flowing through a tube (see col. 5, lines 62-67 & col. 6, lines 1-14). Therefore, it would have been obvious to one having ordinary skill in the art at the time the

invention was made to further modify the system of Lumsden to use pick-off sensors, as taught by Barger, to measure flow in Lumsden's metering system. One of ordinary skill in the art would have been motivated to perform such a modification to gain the benefits of Coriolis flowmeters' lack of moving parts and low resistance to flow, as taught by Barger.

(10) Response to Argument

A. §112 ¶1 rejections (§III of Appellant's brief)

Appellant's brief (p. 7, ¶3) argues that Figs. 1 & 3 and the accompanying text at p. 6, lines 6-30 and p. 7, line 25 – p. 8, line 24 disclose signaling a tamper condition in the signal conditioning circuitry. The specification and figures disclose the host generating “a signal indicating possible tampering or other type of error … The processing unit may then cease operation of the system …” (p. 8, ¶4). However, none of the cited sections disclose that the host signals a tamper condition in the signal conditioning circuitry. The claim recites that the host signals a tampering condition, but contradicts this by reciting that the tampering signal is in the signal conditioning circuitry. On p. 7, ¶4 of Appellant's brief, Appellant states “the error condition indicates tampering in the signal conditioning circuitry”. However, the specification discloses “a signal indicating possible tampering or other type of error” (p. 8, ¶4) rather than a “tampering condition”. Therefore, the specification discloses only that possible tampering is signaled, the specification does not disclose that the error condition disclosed in the specification explicitly indicates tampering and the specification does not disclose that the host signals a tampering condition in the signal conditioning circuitry. For these reasons, it is believed that the rejections under 35 U.S.C. §112 ¶1 should be sustained.

B. §112 ¶2 rejections (§IV of Appellant's brief)

Regarding claims 1, 12, 23 & 34, in light of Appellant's description in the brief (p. 7, ¶4), "signal a tampering condition in the signal conditioning circuitry" is understood to be equivalent to "signal a tampering condition, indicative of a tampering condition existing in the signal conditioning circuitry". **Therefore, the rejection under 35 U.S.C. 112, second paragraph is withdrawn.**

General description of U.S. Patent 4,388,690 to Lumsden

Lumsden discloses a transponder which, in response to a periodic request, sends a word set, including a transponder identification code, a customer identification code and data stored to a central location where the information is compared to initial information (transponder code, customer identification code and data threshold). If the received information is not equal to the initial information (Lumsden discloses the instance when the data stored is over a predetermined threshold), an error is signaled (Lumsden discloses the instance when a load shed/change in power usage is issued). The instant specification discloses no specific definitions of tampering, other than to describe that tampering is detected by determining by comparison that initial information is different than received information, a process step that the Lumsden system performs. Lumsden's transponder sends a word set, containing information unique to the transponder, customer and customer usage, the entirety of which is compared to initial information, as further described below.

C. §102(b) rejections (§V of Appellant's brief)

The instant specification discloses detecting possible tampering by comparing an initial information to a current information (p. 8, ¶4). The claimed invention is directed to a system that

performs this comparison. The nature of “tampering” by a third party is out of the control of both the instant invention and the invention of Lumsden. To perform the comparison operation is to detect tampering, as the instant application has defined it, regardless of the nature of the act of possible tampering or the nature of the third party that performs the possible tampering.

Appellant’s brief (p. 9, ¶2-4) argues that Lumsden does not teach an error condition that indicates tampering in the signal conditioning circuitry, with the signaling being in response to the authentication information not being equal to the initial information. First, it is noted that Appellant’s claims do not recite an “error condition”, but rather a tampering condition. However, Lumsden discloses an error condition or tampering condition/load shed command indicating possible tampering in the signal conditioning circuitry/transponder (col. 4, lines 35-40) in response to authentication information/word set (col. 8, line 54 – col. 9, line 6) not being equal to the initial information (col. 4, lines 35-40). The instant specification discloses detecting possible tampering by comparing initial information to current information. Lumsden compares authentication information/word set, which contains an identification code word, customer identification code word and data stored in the transponder (col. 3, lines 9-13 and lines 23-27) to an initial authentication information (identification code word, customer identification code and data stored) with the initial values (data stored is compared to a predefined quota in one instance) and upon the stored data exceeding the predefined quota, signaling an error condition/load shed (col. 4, lines 35-40, col. 6, lines 62-67 & col. 8, lines 54-62).

Appellant’s brief (p. 9, ¶4) argues that Lumsden’s electrical power consumption level is not equivalent to authentication information. However, the authentication information is the word set, which includes the identification codes and usage information, all of which is

compared to some initial value. When a change from initial information is detected in the received authentication information (usage information is greater than a certain predetermined threshold), an error/load shed is signaled. Further, the claims do not recite limitations further defining “authentication information”, other than it is information at a certain point in time which is compared to initial information to detect a change in the information.

Appellant’s brief (p. 9) argues that because the transponder identification code is hard-wired and therefore cannot be tampered with or changed. However, any element of a device can be subject to tampering, alteration or destruction, regardless of whether the element is a software or data-based element or is a hardware-based element. Therefore, any data compared by Lumsden can indicate possible tampering; this tampering includes an excess usage of electricity, as in the instance of the usage data being greater than a predetermined threshold, which causes a load shed operation.

D. §103(a) rejections (§VI of Appellant’s brief)

Appellant’s brief (p. 10, ¶4 – p. 13) argues that the claims rejected under 35 U.S.C. §103(a) are improperly rejected based on the previous arguments. Therefore, regarding these arguments, referral is made to the response to arguments listed above in this Examiner’s Answer.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

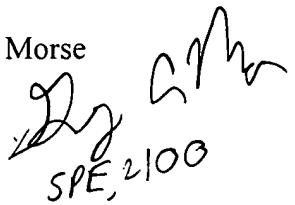
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